### (19) World Intellectual Property Organization

International Bureau



## . | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1881 | 1882 | 1883 | 1884 | 1884 | 1884 | 1884 | 1

#### (43) International Publication Date 11 August 2005 (11.08.2005)

#### **PCT**

# (10) International Publication Number WO 2005/072349 A2

(51) International Patent Classification: Not classified

(21) International Application Number:

PCT/US2005/002391

(22) International Filing Date: 25 January 2005 (25.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/539,430 26 January 2004 (26.01.2004) US 10/966,529 14 October 2004 (14.10.2004) US

(71) Applicant and

(72) Inventor: DICKEY, Baron, C. [US/US]; 6809 96th Avenue Southeast, Mercer Island, Washington 98040 (US).

(74) Agents: JOHNSON, Brian, L. et al.; 2600 Century Square, 1501 Fourth Avenue, Seattle, Washington 98101-1688 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

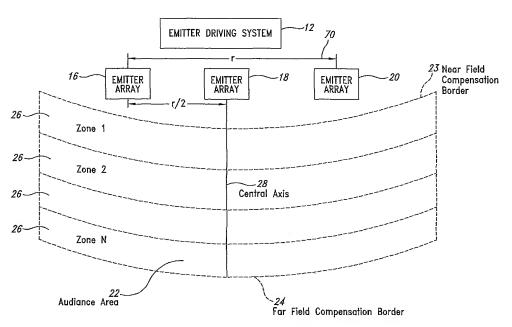
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR SPATIALLY ENHANCING THE STEREO IMAGE IN SOUND REPRODUCTION AND REINFORCEMENT SYSTEMS



(57) Abstract: Sound reproduction and reinforcement systems and methods are presented herein for spatially enhancing stereo images typically used such performances as those involving music. The embodiments seek to expand the amount of audience area that would receive a sound image that maintains sound reproduction fidelity regarding spatial orientation of sound sources involved in an original performance. To expand the audience area receiving spatially faithful sound reproduction certain characteristics of sound have been first studied to find important factors involved.